



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,119	09/20/2001	Kent W. Carey	10004333-1	4191

7590 05/31/2005

AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

PAYNE, DAVID C

ART UNIT	PAPER NUMBER
----------	--------------

2633

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No. 09/961,119	Applicant(s) CAREY, KENT W.	
	Examiner David C. Payne	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-14, 16-23, 25-28 and 30-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-14, 16-23, 25-28 and 30-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 11 and 12 of Amendment filed 27 December 2004, with respect to the rejection(s) of claim(s) 1, 7, 19 and 25 under 35 U.S.C. 103 (a) with respect to Koren have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.
2. Applicant's arguments with respect to Knox however are not persuasive. Applicant alleges that Knox does not teach "passing a desired portion of the received optical signal ...". The examiner looks to the applicant's specification of "passing a desired portion of the received optical signal" It appears that the specification is silent beyond reciting the exact words which have been cited in the claim. Furthermore, it appears that a portion of the desired signal can only refer to the fact that a divided signal is therefore a desired portion. Obviously a wavelength splitter that causes different wavelengths to impinge on the modulator array in Knox is in fact passing a desired portion of the signal. This is extremely clear from a comparison of the applicant's disclosure and the prior art. Thus the applicant arguments are not persuasive.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
 4. Claims 1- 3, 7, 8, 13, 14, 17- 19, 21, 26- 28, 31- 33, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al. US 5,526,155 A (Knox).
- Re claims 1, 2, 3, 7, 13, 14, 17, 18, 19, 21, 27, 28, 31, 32, 33, 35 Knox disclosed

Art Unit: 2633

a broadband frequency spectrum source (11 of Figure 2) that is split into a plurality of different carrier wavelengths (20, 22 of Figure 2) after splitting by a diffraction grating (18) the plurality of signals are then modulated by an array of modulators (26 of Figure 2) responsive to data signals (29 of Figure 2) which are then recombined by the diffraction grating (18) which are then output to a desired transmission medium (34 of Figure 2), see col. 7 lines 1-50. Knox does not disclose the literal "passing a plurality of desire portions of the optical signal using a plurality of modulators, ...".

However, Know disclosed that a portion of the signal from source (11) out of the pick-off mirror (14) is incident on grating (18), see col. 6, lines 54-60. It would have been obvious to one of ordinary skill in the art at the time of invention that not only a portion of the source signal (11) is modulated as evidenced by the preceding passage, but also each modulator (27) in the array (26) receives a portion of the wavelength split beam. Furthermore, every wavelength emitted from the light source is predefined by definition of the inventor having knowledge of the desired light source.

Re claim 8, 26 Knox disclosed where the transmission medium is optical fiber; see col. 7, lines 40-45.

5. Claims 4, 5, 9, 20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al. US 5,526,155 A (Knox) in view of Roberts US 6,313,932 B1.

Re claims, 4, 5 9, 20, 22 and 23, Knox does not disclose

Roberts disclosed frequency modulators as a filter for either passing, filtering portions of the optical signal having respective different wavelengths, see col. 3, lines 33-45. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the frequency modulation and filtering system in Roberts to Know so as to modulate the entire spectrum with data and provide clear channel separation of signals.

6. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al. US 5,526,155 A (Knox) in view of Roberts US 6,313,932 B1 as applied to claim 9 above, and in further view of Wilner et al. US 6,341,021 B1.

Art Unit: 2633

The modified invention of Roberts and Wilner does not teach passbands.

Wilner teaches modulators (OF1, ..., fig. 1A) having a pass band for selecting the optical signal with a pas band, see col. 7 lines 20-37. It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate filter having a passband for selecting a desired portion of a signal and creating greater and reduce power dissipation, see col. 2 lines 60-64.

7. Claims 16, 25, 30, 34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al. US 5,526,155 A (Knox) in view of Young et al. US 5760941 A (Young).

Re claim 16, 25, 30, 34, 36 Knox does not disclose using wherein carrier wavelengths are the same or shared. However, Young disclosed power dividers (104 of Figure 2) transmitting signals into modulators. It would have been obvious to one of ordinary skill in the art at the time of invention to use a more general beam splitter (divider) to duplicate the entire spectrum in each split signal as these type of splitters are extremely well known in the art for replicating signals.

Conclusion

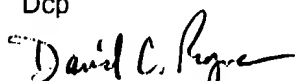
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp


David C. Payne
Patent Examiner
AU 2633